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| 10/019,706      | 05/01/2002  | Stefan Kastner       | VAW-6               | 1805             |

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EXAMINER

COZART, JERMIE E

| ART UNIT | PAPER NUMBER |
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3726

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

88

## Office Action Summary

Application No.

10/019,706

Applicant(s)

KASTNER, STEFAN

Examiner

Jermie Cozart

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 6, 11-14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaul (2,800,709) in view of Junker (1,701,889).

Gaul discloses producing an aluminum composite material (figs. 1-5), wherein at least one cladding layer (2) from a first aluminum material (col. 3, lines 47-51) is provided, the cladding layer (2) is placed on a side of an ingot (1) made from a second aluminum material (col. 3, lines 47-51), and the cladding layer (2) and the ingot (1) are rolled wherein the rolling comprises several roll passes thereby producing the aluminum composite material (col. 4, lines 68-75). Gaul discloses treating at least one surface of the second ingot by preheating and then scalping (col. 4, lines 32-47). *See also figures 1-5 for further clarification.*

Gaul, however, does not disclose cutting the cladding layer from a first ingot made from a first aluminum.

Junker discloses cutting a strip or layer from a first ingot made from a first material (lines 34-65), in order to effectively and inexpensively provide layers/strips with a desired thickness, as compared to traditional manufacturing techniques in which the strips are rolled from cast ingots (lines 1-6). *See figure 1 also for further clarification.*

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cut the layer of Gaul from an ingot, in light of the teachings of Junker, in order to effectively and inexpensively provide layers/strips with a desired thickness.

Regarding **claims 11 and 16**, Gaul discloses all of the claimed subject matter except for the cladding layer having a thickness of 2mm to 100mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cladding layer with a thickness in the range of 2mm to 100mm, as the Examiner takes Official Notice that cladding layers in such a thickness range are conventional and are of sufficient thickness to provide the intended desirable cladding characteristics. Further, it has been held where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

3. Claims 7-10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaul/Junker as applied to claims 6 and 14 above, and further in view of Follrath (3,908,746).

Gaul/Junker as modified above discloses all of the claimed subject matter except for the cutting comprising sawing.

Follrath discloses cutting an ingot (24) comprising sawing the ingot with a saw (145), in order to cut the ingot into the desired length. *See column 8, line 27 – column 9, line 4, and figure 1 for further clarification.*

Therefore, it would have been obvious to one having ordinary skill in the art to substitute the cutting device of Gaul/Junker with a saw to cut/saw the ingot of Gaul/Junker, in light of teachings of Follrath, in order to cut the ingot into the desired length. Clearly the two types of cutting devices are functional equivalents in the art for cutting ingots.

Regarding **claim 8**, Gaul discloses all of the claimed subject matter except for the cladding layer having a thickness of 2mm to 100mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cladding layer with a thickness in the range of 2mm to 100mm, as the Examiner takes Official Notice that cladding layers in such a thickness range are conventional and are off sufficient thickness to provide the intended desirable cladding characteristics. Further, it has been held where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves on routine skill in the art. *In re Aller*, 105 USPQ 233.

#### ***Response to Arguments***

4. Applicant's arguments filed 8/29/06 have been fully considered but they are not persuasive.

Applicant argues that 1) neither Gaul, Junker, or Follrath teach or suggest cutting cladding layers directly from an ingot as claimed by Applicant and 2) there is no motivation to combine the teachings of Gaul with Junker and/or Follrath.

In response, the Examiner maintains that Gaul as described in detail above discloses all of the claimed subject matter including providing a cladding layer, however,

Gaul does not disclose cutting the cladding layers directly from an ingot. Junker discloses cutting a layer from an ingot. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to cut the cladding layer of Gaul from an ingot, in light of the teachings of Junker, in order to provide a layer with the desired dimensions.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Gaul teaches all of the claimed subject matter including providing a cladding layer, however, Gaul fails to teach providing the cladding by cutting. Junker teaches providing a layer by cutting the layer from an ingot based on the use of the cutting tool. Therefore, it would have been obvious to one having ordinary at the time the invention was made to cut the layer of Gaul from an ingot, in light of the teachings of Junker, in order to provide a layer with the desired thickness.

Applicant further argues that the liner or cladding strip of Gaul is not cut from an aluminum ingot and immediately rolled together with the core ingot to become a composite material.

In response, the Examiner acknowledges that although Gaul does not specify whether the cladding strip is cut from an aluminum ingot, the claimed invention does not require immediately rolling the cladding strip with the core ingot to become a core ingot. The cutting of a strip from an ingot is taught by Junker as explained in detail above.

Applicant argues that Junker does not disclose producing a cladding layer or any other metal strips suitable for cladding. Applicant also states that in view of Junker's silence as to cladding layers and especially to aluminum strips which may be used as cladding layers, a person skilled in the art would not find it obvious to combine Junker with Gaul in order to arrive at the presently claimed invention.

In response, the Examiner maintains that Junker was provided to show a strip of material may be cut from an ingot. The strip of material is similar in dimensions to a cladding strip/layer. Although Junker is silent with respect to whether or not the layer/strip is suitable for use as a cladding layer, the teaching of a strip suitable for use as a cladding strip/layer has already been provided by Gaul, Junker was only cited to show that a strip of material may be cut from an ingot. Junker discloses that a strip of material may be cut from an ingot to the desired dimensions. The teachings of Junker provide one of ordinary skill in the art at the time of invention with the necessary motivation to cut a layer/strip of material from an ingot to the desired dimensions.

Applicant also argues that Junker does not suggest the possibility that a layer peeled off by a cutting tool is, without further rolling, already suitable for use as a cladding layer in a composite material.

In response, the Examiner maintains although Junker does not suggest the possibility that a layer peeled off by a cutting tool is without further rolling already suitable for use as a cladding layer in a composite material this does not preclude one of ordinary skill in the art from looking to Junker for a teaching of cutting a strip/layer of material from an ingot to a desired dimension.

Applicant argues that the combination of Junker and Gaul still requires that a cladding layer cut from an ingot would still be processed to form a stock liner.

In response, the Examiner disagrees with Applicant's assertion that the combination of Junker and Gaul requires that a cladding layer cut from an ingot would still be processed to form a stock liner. The teaching of Junker would lead one of ordinary skill in the art to form the strip/layer of material of Gaul from an ingot. Gaul discloses a cladding layer, however, Gaul is silent with respect to the manner in which the cladding layer is produced other than referring to the layer as a liner. Therefore it can be assumed that the layer/liner is obtained from a second ingot in an effort to obtain a variety of different sized liners/layers for multiple cladding operations. Based on the rationale provided, it would have been obvious to one having ordinary skill in the art to obtain a layer from an ingot by cutting in order to obtain a number of cladding layers. Nowhere does Gaul require that the cladding layer cut from an ingot be processed to form a stock liner. Gaul only discloses providing a cladding layer/liner, and does not disclose the manner by which the layer/liner is formed, and therefore Applicant's assertions are only assumptions.



Applicant argues that Junker does not teach or suggest that for producing the composite material, the step of welding the cladding liner to the core material may be omitted and that instead the cladding liner and the ingot material are bonded to each other only by rolling.

In response, the Examiner maintains that Junker was not cited to show that for producing the composite material, the step of welding the cladding liner to the core material may be omitted and that instead the cladding liner and the ingot material are bonded to each other only by rolling.

Applicant argues that Follrath fails to teach or suggest cutting of cladding layers directly from an ingot.

In response, the Examiner maintains that Follrath was cited to show cutting of an ingot comprises sawing. The cutting of cladding layers from an ingot is taught by the combination of Gaul in view of Junker above.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3726

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie Cozart whose telephone number is 571-272-4528. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JERMIE E. COZART  
PRIMARY EXAMINER

November 12, 2006